

WHAT IS CLAIMED IS:

1. A method for fabricating a field emission display baseplate,
comprising following steps:

providing a first substrate;

5 forming a first conducting layer and connecting-conducting lines
on one surface of said first substrate, wherein said connecting-conducting
lines locating on the peripheral part of said first substrate, and said first
conducting layer doesn't connect with said connecting-conducting lines;

10 forming an insulating layer over the surface of said first
conducting layer;

forming a second conducting layer on the surface of said
insulating layer;

forming a plurality of holes penetrating through said insulating
layer and said second conducting layer to said first conducting layer; and

15 forming a plurality of cones on the first conducting layer of said
holes.

2. The method as claimed in claim 1, further comprising
forming a resist layer on said first conducting layer before forming said
insulating layer over said surface of said first conducting layer

20 3. A method for fabricating a field emission display,
comprising following steps:

providing a first substrate and a second substrate, wherein at least
one surface of said second substrate is coated with at least a layer of
phosphor;

25 forming a first conducting layer and connecting-conducting lines

on one surface of said first substrate, wherein said connecting-conducting lines locating on the peripheral part of said first substrate, and said first conducting layer doesn't connect with said connecting-conducting lines;

forming at least an insulating layer over the surface of said first
5 conducting layer and over part of the surface of said connecting-conducting lines;

forming a connecting-hole or a connecting-groove penetrating through said insulating layer for each connecting-conducting lines;

forming a second conducting layer on said insulating layer,
10 wherein part of said second insulating layer connects said connecting-conducting lines through said connecting-hole or said connecting-groove;

forming a plurality of holes penetrating through said insulating layer and said second conducting layer to said first conducting layer;

15 forming a plurality of cones having at least one microtip on the first conducting layer of said holes; and

combining said first substrate with said second substrate, and sealing the periphery of said first substrate and said second substrate with gel, wherein said gel is sandwiched between said second substrate and
20 said insulating layer over said connecting-conducting lines or over said first substrate.

4. The method as claimed in claim 1 or 3, wherein said first substrate is made by glass.

5. The method as claimed in claim 3, wherein said second
25 substrate is made by glass.

6. The method as claimed in claim 1 or 3, wherein said hole is a cylindrical hole.

7. The method as claimed in claim 1 or 3, wherein said insulating layer is made by silicone oxide.

5 8. The method as claimed in claim 1 or 3, wherein said first conducting layer is a metal layer containing tantalum, niobium, or molybdenum.

9. The method as claimed in claim 1 or 3, wherein said first conducting layer is a metal layer containing niobium.

10 10. The method as claimed in claim 1 or 3, wherein said second conducting layer is a metal layer.

11. A field emission display baseplate, comprising:

a first substrate;

15 a first conducting layer locating on one surface of said first substrate;

an insulating layer having a plurality of holes, said insulating layer locates over the surface of said first conducting layer or over partial surface of said first substrate;

20 a second conducting layer having a plurality of holes, said second conducting layer locates on said insulating layer;

a plurality of cones having at least one microtip, said cones locate on the surface of said first conducting layer inside said holes, said microtips are surrounded by the walls of insulating layer or said second conducting layer; and

25 a plurality of connecting-conducting lines locating on the

peripheral parts of said first substrate;

wherein said first conducting layer doesn't connect with said second conducting layer; said first conducting layer doesn't connect with said connecting-conducting lines; and said connecting-conducting lines
5 connect second conducting layer.

12. The field emission display baseplate as claimed in claim 11, further comprising a resist layer sandwiched between said insulating layer and said first conducting layer.

13. The field emission display device, comprising:

10 a first substrate;

a second substrate coated with at least a layer of phosphor;

a first conducting layer locating on one surface of said first substrate;

a plurality of connecting-conducting lines locating on the
15 peripheral parts of said first substrate;

an insulating layer having a plurality of holes, said insulating layer locates over the surface of said first conducting layer, over the surface of connecting-conducting lines, or over partial surface of said first substrate;

20 a second conducting layer having a plurality of holes, said second conducting layer locates on said insulating layer;

a plurality of cones having at least one microtip, said cones locate on the surface of said first conducting layer inside said holes, said microtips are surrounded by the walls of insulating layer or said second
25 conducting layer; and

a sealing gel sandwiched by said second substrate and said insulating layer over said connecting-conducting lines or over said first substrate;

wherein said first conducting layer doesn't connect with said second conducting layer; said first conducting layer doesn't connect with said connecting-conducting lines; and said connecting-conducting lines connect second conducting layer.

14. The field emission display device as claimed in claim 13, wherein said first substrate is made by glass.

10 15. The field emission display device as claimed in claim 13, wherein said second substrate is made by glass.

16. The field emission display device as claimed in claim 13, wherein said hole is a cylindrical hole.

15 17. The field emission display device as claimed in claim 13, wherein said insulating layer is made by silicone oxide.

18. The field emission display device as claimed in claim 13, wherein said first conducting layer is a metal layer containing tantalum, niobium, or molybdenum.

20 19. The field emission display device as claimed in claim 13, wherein said first conducting layer is a metal layer containing niobium.

20. The field emission display device as claimed in claim 13, wherein said second conducting layer is a metal layer.